

July 13, 2023

Docket No.: 52-026

ND-23-0587
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.6.02.02c [Index Number 595]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC), Item 2.6.02.02c [Index Number 595]. This ITAAC confirms that the load group 1, 2, 3, and 4 inverters in the Non-Class 1E Direct Current (DC) and Uninterruptible Power Supply (UPS) System (EDS) supplies the corresponding alternating current (AC) load. The closure process for this ITAAC is based on the guidance described in NEI 08-01, "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52," which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,



Jamie M. Coleman
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of 2.6.02.02c [Index Number 595]

JMC/CSS/sfr

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cc: Regional Administrator, Region II
 Director, Office of Nuclear Reactor Regulation (NRR)
 Director, Vogtle Project Office NRR
 Senior Resident Inspector – Vogtle 3 & 4

**Southern Nuclear Operating Company
ND-23-0587
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of 2.6.02.02c [Index Number 595]**

ITAAC Statement

Design Commitment

2.c) Each EDS load group 1, 2, 3, and 4 inverter supplies the corresponding ac load.

Inspections, Tests, Analyses

Testing of each as-built inverter will be performed by applying a simulated or real load, or a combination of simulated or real loads, equivalent to a resistive load greater than 55 kW.

Acceptance Criteria

Each inverter provides a line-to-line output voltage of $208 \pm 2\%$ V at a frequency of $60 \pm 0.5\%$ Hz.

ITAAC Determination Basis

Testing was performed in accordance with Unit 4 component test package work orders listed in Reference 1 to demonstrate that each Non-Class 1E direct current (DC) and Uninterruptible Power Supply System (EDS) load group 1, 2, 3, and 4 inverter identified in the Combined License (COL) Appendix C, Table 2.6.2-2 (Attachment A) supplies its corresponding alternating current (AC) load.

A load test was performed on each EDS inverter by applying a simulated load greater than the inverter design capacity of 55 kilowatts (kW). Inverter output voltage, frequency, and power were continuously monitored during the test and after stabilization of load, recorded on data sheets included in the component test package work orders listed in Reference 1. Output voltage was verified to meet the specified acceptance criteria of $208 \pm 2\%$ Volts (V) at a frequency of $60 \pm 0.5\%$ Hertz (Hz) with the specified load applied. The recorded voltage and frequency values are identified in Attachment A for each EDS inverter.

The Unit 4 component test results confirm that each inverter provides a line-to-line output voltage of $208 \pm 2\%$ V at a frequency of $60 \pm 0.5\%$ Hz.

The Unit 4 test results (Reference 1) are available for NRC inspection as part of the Unit 4 ITAAC 2.6.02.02c Completion Package (Reference 2).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC.

The ITAAC completion review is documented in the ITAAC Completion Package 2.6.02.02c (Reference 2) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.6.02.02c was performed for VEGP Unit 4 and that the prescribed acceptance criteria were met. Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. SV4-EDS-ITR-800595, Rev. 0, "Frequency and Voltage Test Results of Unit 4 EDS Inverters: ITAAC 2.6.02.02c, NRC Index Number: 595"
2. 2.6.02.02c-U4-CP-Rev0, ITAAC Completion Package

Attachment A

System: Non-Class 1E dc and Uninterruptible Power Supply System

* Excerpt from COL Appendix C, Table 2.6.2-2

*Component Name	*Tag No.	Load Bank Voltage and Frequency @ >55kW [#]		
		Line A-B	209.3 V	59.98 Hz
Load Group 1 Inverter	EDS1-DU-1	Line B-C	208.8 V	
		Line C-A	206.8 V	
Load Group 2 Inverter	EDS2-DU-1	Line A-B	208.2 V	59.98 Hz
		Line B-C	208.2 V	
		Line C-A	208.3 V	
Load Group 3 Inverter	EDS3-DU-1	Line A-B	208.4 V	60.00 Hz
		Line B-C	208.8 V	
		Line C-A	208.8 V	
Load Group 4 Inverter	EDS4-DU-1	Line A-B	206.1 V	60.00 Hz
		Line B-C	206.5 V	
		Line C-A	207.4 V	

[#]Actual test conditions were > 75kW